



Bureau of Safety and Environmental Enforcement

# Office of Technical Data Management

Jeff Harris

GOMR Office of Technical Data Management

Colombian Delegation Visit

April 23, 2018

"To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."

# BSEE Mission Statement

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

# Office of Technical Data Management

## Deliver Quality in Data & Information Management

- Enforce compliance with well data reporting regulations
- Provide technical data management to ensure the timely submittal of quality open hole well data
  - All data is checked for:
    - timeliness, format, completeness and accuracy.
- Maintain and correct historical well data

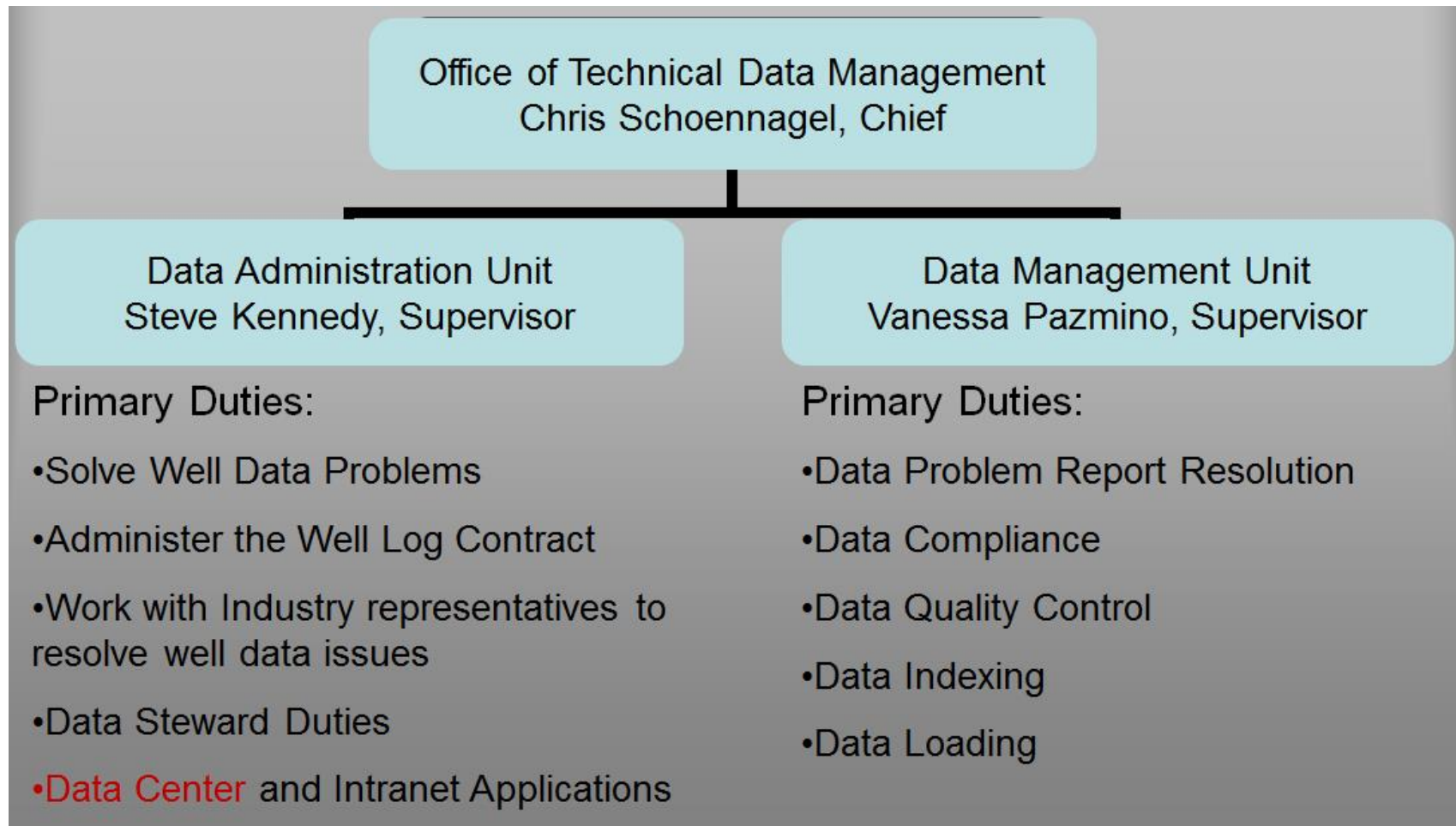
# Office of Technical Data Management

## Deliver Quality in Data & Information Management

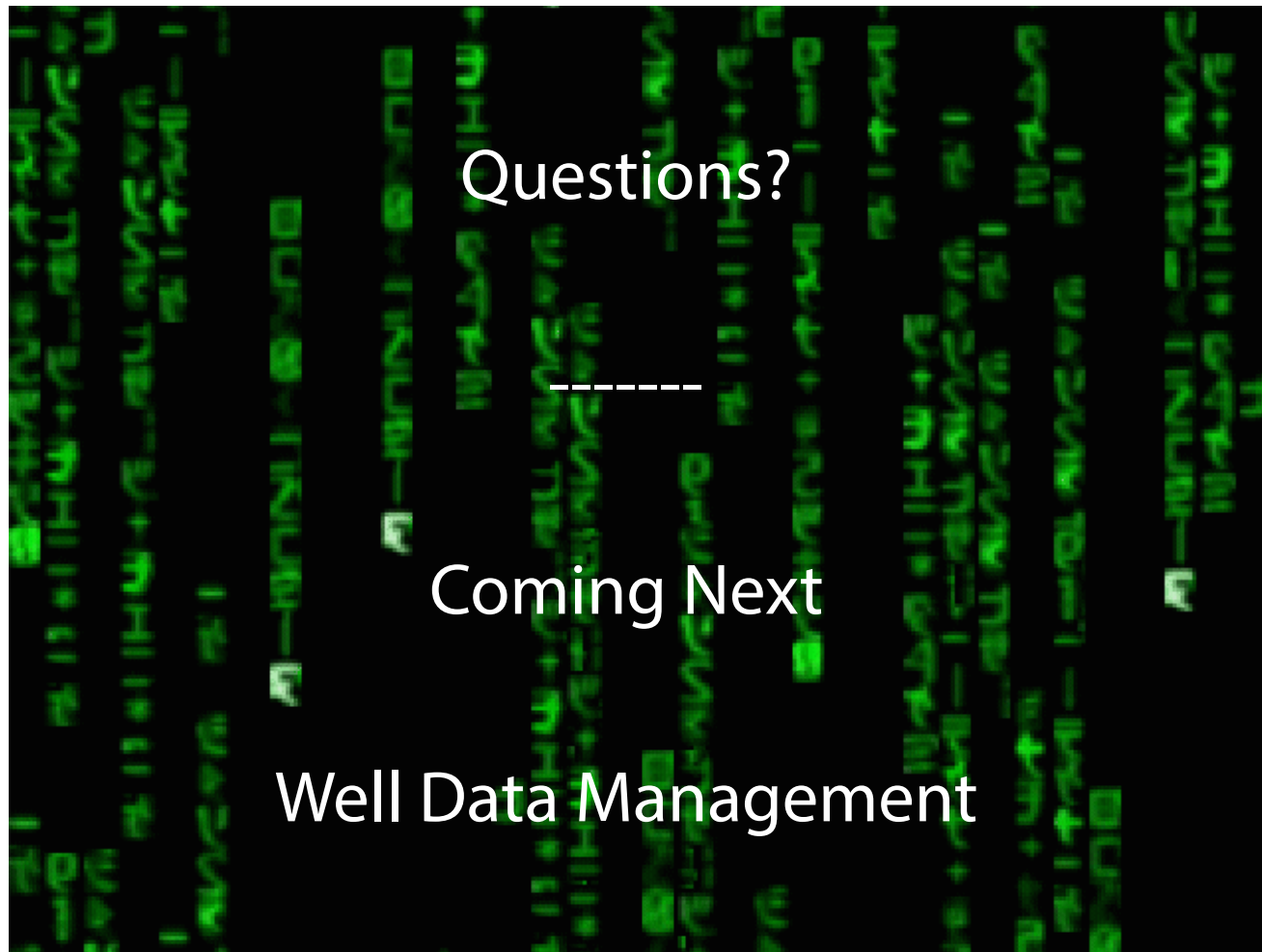
- Manage and support the contract for the submission, processing, and delivery of well logs and LAS curves for all OCS Regions
- Manage and support the contract for Data and Information Services
- Maintain and support Data Center (public release of BSEE/BOEM data) and Intranet applications

# Office of Technical Data Management

## Deliver Quality in Data & Information Management



# Office of Technical Data Management



Questions?

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Coming Next

Well Data Management

# Office of Technical Data Management

## Well Data Management

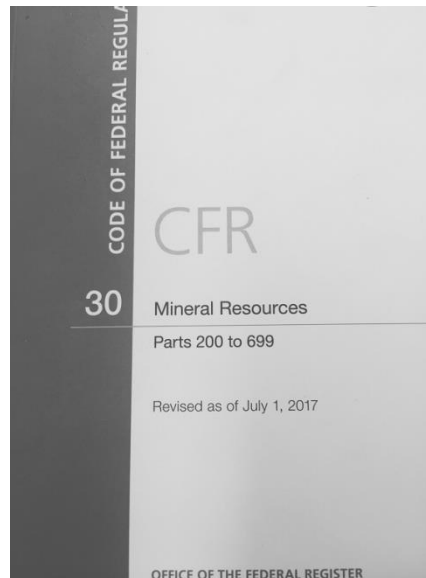
- Authority to require well data submittal
- Submittal of data
- What data do we receive?
- How do we know what data were run?
- Contractor duties
- Quality control and loading
- Access to the data

# Office of Technical Data Management

## Authority to Require Well Data Submittal

### Code of Federal Regulations

## 30 CFR 250.742 and 745



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

NTL No. 2016-N07

Effective Date: November 29, 2016

#### NATIONAL NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULFUR LEASES, OUTER CONTINENTAL SHELF

##### Well Records Submittal

##### Purpose

This Notice to Lessees and Operators (NTL) supersedes NTL Nos. 2010-G02, 2010-P03, and related guidance on this subject. Pursuant to 30 CFR 250.103, the Bureau of Safety and Environmental Enforcement (BSEE) is issuing this NTL to clarify and provide more detail about how to submit well records required by the Records and Reporting regulations at 30 CFR 250.740 – 250.745 (new section numbers as of July 28, 2016)<sup>1</sup> for all OCS Regions, including:

- specific well records you<sup>2</sup> must submit,
- submittal dates for the various well records,
- locations where you must send these well records,
- Region-specific requirements for well records submittal, and
- utilization of eWell, BSEE's electronic well permitting system.

A summary of notable updates from previous guidance on this topic can be found in Attachment 3 of this NTL.

BSEE assigns each well a unique 12-digit U.S. Well Number, formerly known as an API Number, based on the numbering system managed by the Professional Petroleum Data Management (PPDM) Association, and then collects, verifies, and stores data according to well number. BSEE uses well records submitted by lessees/operators to make informed regulatory decisions based on your timely submittal of complete and accurate well records. See 30 CFR 250.740 for information about what records you must keep. For purposes of this NTL, the "submittal date" is the original date the records are due to the appropriate office.

##### Authority

The Records and Reporting provisions in Subpart G—Well Operations and Equipment, 30 CFR §§ 250.740 – 250.746, set forth BSEE's regulatory requirements for what well records you must keep and for how long, and what records you must submit. While many specific requirements are set forth in the regulatory sections, BSEE recognizes that additional submittals may be needed to ensure that

<sup>1</sup>Effective July 28, 2016, pursuant to the issuance of the Blowout Preventer Systems and Well Control rule, see 81 Fed. Reg. 25887 at 25926 (April 29, 2016), BSEE revised and renumbered the regulations previously published at 30 CFR 250.466, 250.468 and 250.469. The current renumbered citations are 30 CFR 250.740, 250.742, and 250.743.

<sup>2</sup>"You" is defined at 30 CFR 250.105 as "a lessee, the owner or holder of operating rights, a designated operator or agent of the lessee(s), a pipeline right-of-way holder, or a State lessee granted a right-of-use and easement." Additionally, the lessee, operator (if one has been designated), and the person that actually performs an activity (which includes contractors) to which a particular provision of a regulation, lease, permit, or plan applies are jointly and severally responsible for complying with that provision. (See, 81 Fed. Reg. at 25904, citing 30 CFR 250.146(c)).

## Notice to Lessees (NTL)

## NTL No. 2016-N07



# Office of Technical Data Management

## Submittal of Data

- Well Log Data submitted directly to contractor  
(TGS Geological Services)
  - Image Data
  - Digital Vector Data
  - Mudlog Data
- Well Data submitted directly to TDM
  - Directional Surveys
  - Velocity Surveys / VSP
  - Core Analysis
  - Geochemical Analysis
  - PVT / Fluid Analysis
  - Paleontological Reports
- All data submitted in electronic format
  - No paper allowed after 2006

# Office of Technical Data Management

Data received by contractor

- Well Log Images
  - CGM, PDS, Metafile, TIFF
- Digital Well Logs
  - LIS, DLIS and LAS
- Mud Logs
  - TIFF, ODF and GDF

# Office of Technical Data Management

Data received directly by TDM

- Directional Surveys
  - BSEE Standard ASCII
- Velocity Surveys
  - BSEE Standard ASCII
- Vertical Seismic Profiles (VSP)
  - SEGYY, Graphic Files (CGM, JPEG, TIFF)
  - Excel, Word and Power Point
- Core Analysis
  - Excel, Word, JPEG, CGM and TIFF

# Office of Technical Data Management

Data received directly by TDM

- Geochemical Analysis

- Graphic files (CGM, JPEG, TIFF)
- Excel, Word and PowerPoint

- PVT/Fluid Analysis

- Excel, Word, Graphic files (CGM, JPEG, TIFF)

- Paleontological Reports

- Excel spreadsheet and DEX
  - (Data Exchange Format – can be read by Excel and Word)

# Office of Technical Data Management

## How Do We Know What Data Were Run?

- The Operators submit an *eWell Open Hole Report* indicating what data have been acquired
- Must submit information on data the week it is acquired
- Information is automatically used in the TDM compliance process

# Office of Technical Data Management

## eWell – Open Hole Report

**Operational:**  
**Start Date:** 11/04/2007  
**End Date:** 11/10/2007  
**Status:** Approved

**API:** 608174112200  
**Surface:**  
**Bottom:**  
**Operator:** BP Exploration & Production Inc.  
**District:** New Orleans District

**Well Name:** TF001 **ST:** 00 **BP:** 00  
**Lease:** G09868 **Area/Block:** MC/778  
**Lease:** G09867 **Area/Block:** MC/777

### Check the following data items if collected in the borehole.

- ☒ Velocity Surveys
 ☒ Vertical Seismic Profile
 ☐ Conventional Cores  
☒ Rotary Sidewall Cores
 ☐ Percussion Sidewall Cores

### If samples are collected, What analysis will be performed?

- ☒ PVT Analysis
 ☒ Paleo Analysis
 ☒ Geochem Analysis

### Contact and Geoscientist Information

Contact		Geoscientist	
<b>Name:</b>	Rebecca C Arnold	<b>Name:</b>	Tom M Byrd
<b>Phone:</b>	2813665378	<b>Phone:</b>	2813664007
<b>E-Mail Address:</b>	rebecca.arnold@bp.com	<b>Email Address:</b>	tom.byrd@bp.com

### List all Open Hole Logs

- ☐ No Wireline Logs Run
 ☐ Ongoing MWD/LWD and/or Mudlog Operations

	Service Company	Date Operations Completed	Tool Logging Method	Log Tool Code	Interval Depth (MD ft)	
					Top	Bottom
<input type="radio"/>	Geoservices	11/08/2007	MUDLOG		9999	22775
<input type="radio"/>	SCHLUMBERGER	11/08/2007	WIRELINE	CALI/CMR/CNL/DIR/ECS/GR/LDS/MDT/MRCT/NGS/OMBI2/RTSCAN/SONSCAN/VS	15974	22800
<input type="radio"/>	SCHLUMBERGER	11/08/2007	MWD/LWD	ADN/APWD/ARC/DIR/ECO/GR/SON-VIS/TELE	9999	22775

# Office of Technical Data Management

## Contractors Duties

- Receive, verify and check accuracy of all well log data submitted by operators and assist with compliance.
- Convert image formats to TIF
- Convert digital formats to LAS
  - Process LAS data to *Workstation Ready* format
    - ED – edited and corrected RAW data using original curve mnemonics
    - WS – composite edited data and use only set number of generic curve mnemonics. Best data set for users The Operators submit and *eWell Open Hole Report* indicating what data have been acquired
- Deliver data to BSEE
  - Image and Mudlog data – within 24 hours of receipt
  - LAS data – process and deliver within 7 days
- Act as agent for BSEE to sell data to public

# Office of Technical Data Management

## TDM: Quality Control and Loading

- The Physical Science Technicians (PST) of the Data Management Unit (DMU) are responsible for quality checking and loading the data to the TIMS database.
- All **Well Logs** are received from contractor through a secure T1 line directly from their office and are loaded via a loading script. Receive, verify and check accuracy of all well log data submitted by operators and assist with compliance.
- All Well Data are loaded into TIMS through the Maintain Well Data Attachment (MWAD) screen into the individual data types.
- The PSTs are responsible for verifying the metadata for all data received and loaded. There are business rules embedded in the loading process to help eliminate data loading errors.



# Office of Technical Data Management

## BOEM / BSEE Access to the Data

MMS

Action TMS Main Menu Navigate Edit Block Record Field Query Help Window

PROPRIETARY

Maintain Well Attachment Data - (MWAD)

Boreholes View

API Well Number	Well	ST	BP	Date	Total Depth	Field	Lease	Area	Block	Operator	Operator Name
608174088400	001	00	00	Spud 26-APR-2000	RKB 46 MD 26060	Surface MC776	C09866	MC	776	02481	BP EXPLORATION &
Status ST	Type Exploratory	Total Depth 23-JUL-2000	WD 5636	TVD 26046	Bottom MC776	G09866	MC	776	02481	BP EXPLORATION &	

Well File Images Cores Directionals Seachems LAS Curves Log Images Mudlogs Paleos PVFs Velocities Other WARs R

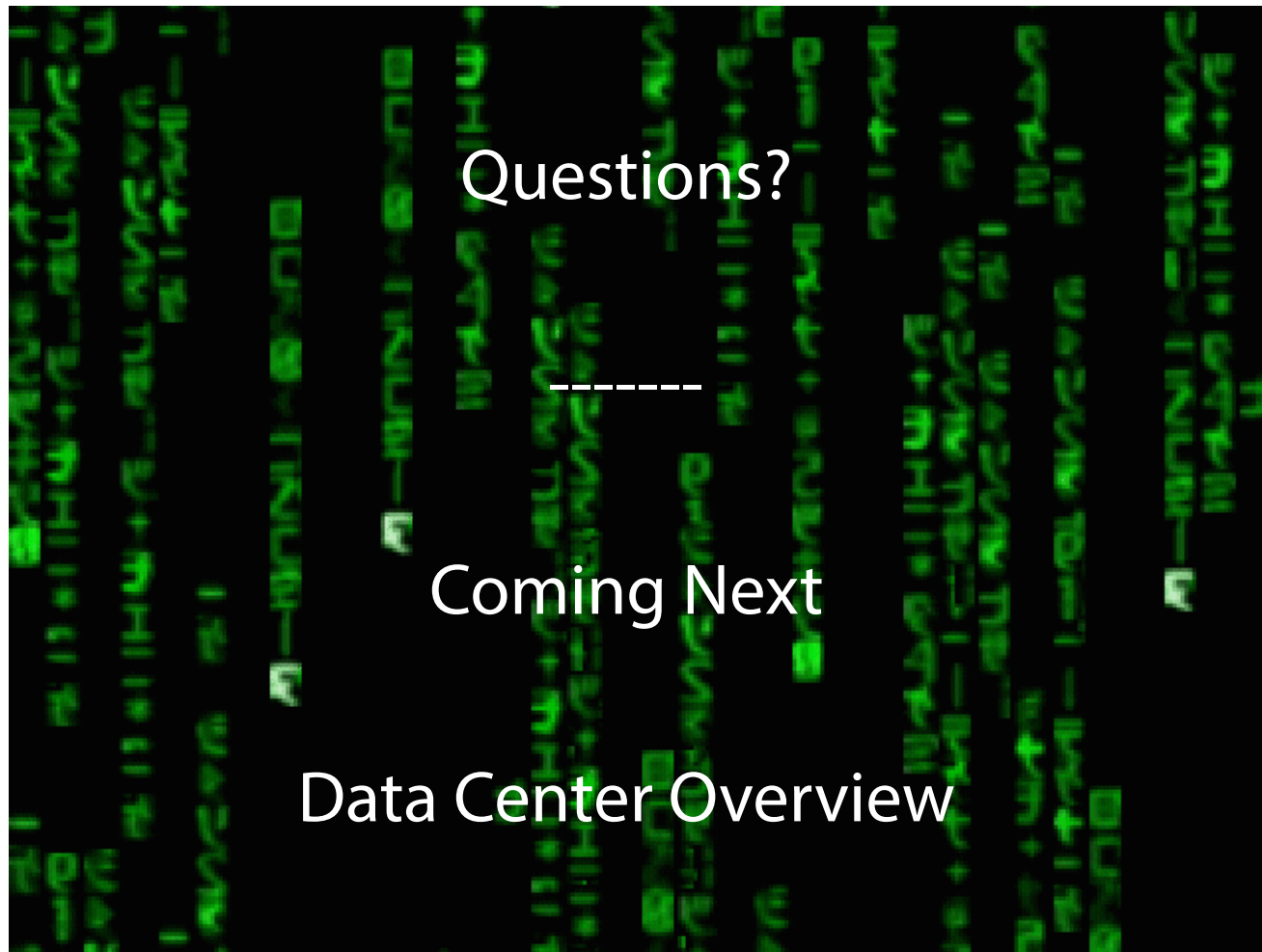
Att Desc	Created Date	Receipt Date	File Path
View Sundry Report	30-SEP-2001		/images/preascent/images7/07/00/mcwf01101ac
View Correspondence-Transmittal	26-FEB-2010	20-SEP-2004	/images2/image2/02/05/nod006781ID965797.tif
View Miscellaneous	17-MAR-2005	19-NOV-2002	/images/image6/00/06/mcwf01101ID456013.tif
View WAR-Well Activity Report	26-FEB-2010	30-OCT-2002	/images2/image2/02/05/nod006781ID965747.tif
View WAR-Well Activity Report	26-FEB-2010	30-OCT-2002	/images2/image2/02/04/nod006781ID965742.tif
View WAR-Well Activity Report	26-FEB-2010	23-OCT-2002	/images2/image2/02/05/nod006781ID965749.tif
View WAR-Well Activity Report	26-FEB-2010	16-OCT-2002	/images2/image2/02/04/nod006781ID965754.tif
View WAR-Well Activity Report	26-FEB-2010	09-OCT-2002	/images2/image2/02/04/nod006781ID965757.tif
View WAR-Well Activity Report	26-FEB-2010	02-OCT-2002	/images2/image2/02/04/nod006781ID965762.tif
View WAR-Well Activity Report	26-FEB-2010	25-SEP-2002	/images2/image2/02/04/nod006781ID965767.tif
View WAR-Well Activity Report	26-FEB-2010	18-SEP-2002	/images2/image2/02/05/nod006781ID965770.tif

Attachments

Label	Security Class	Att Date	Att Filename
View	GOVT USE ONLY	16-SEP-2010	
Desc			
View			
Desc			

Enter value for Lease  
Record: 1/1 <OSC>

# Office of Technical Data Management



# Office of Technical Data Management

## Data Center (Process and Support)

### ● Data Center Process

- Data retrieved from BOEM / BSEE corporate database (TIMS / NCIS)
- Filtered through proprietary queries
- Available to the public via [BOEM](#) and [BSEE Data Center](#) website
  - Updated at regular intervals (monthly, weekly, daily)
    - A few every 4 hours

### ● Support

- Instructional [video tutorials](#)
- Email questions via [TDM@bsee.gov](mailto:TDM@bsee.gov)



# Office of Technical Data Management

## Data Center (Online Queries and Disc Media Store)

- User friendly Data/Document retrieval options
  - [Online Queries](#) (exports in PDF, XLS, CSV)
  - Downloadable [Scanned Documents](#)
  - [PDF Reports](#) and [ASCII Files](#) ([delimited](#) and [fixed](#)) including publicly available copies of [eWell reports](#)
- Ability to purchase data through the
  - [Disc Media Store](#)
    - CD / DVD / BluRay discs of
      - Well Data
      - Well Files
      - Well Log Images
      - Raw Log Files



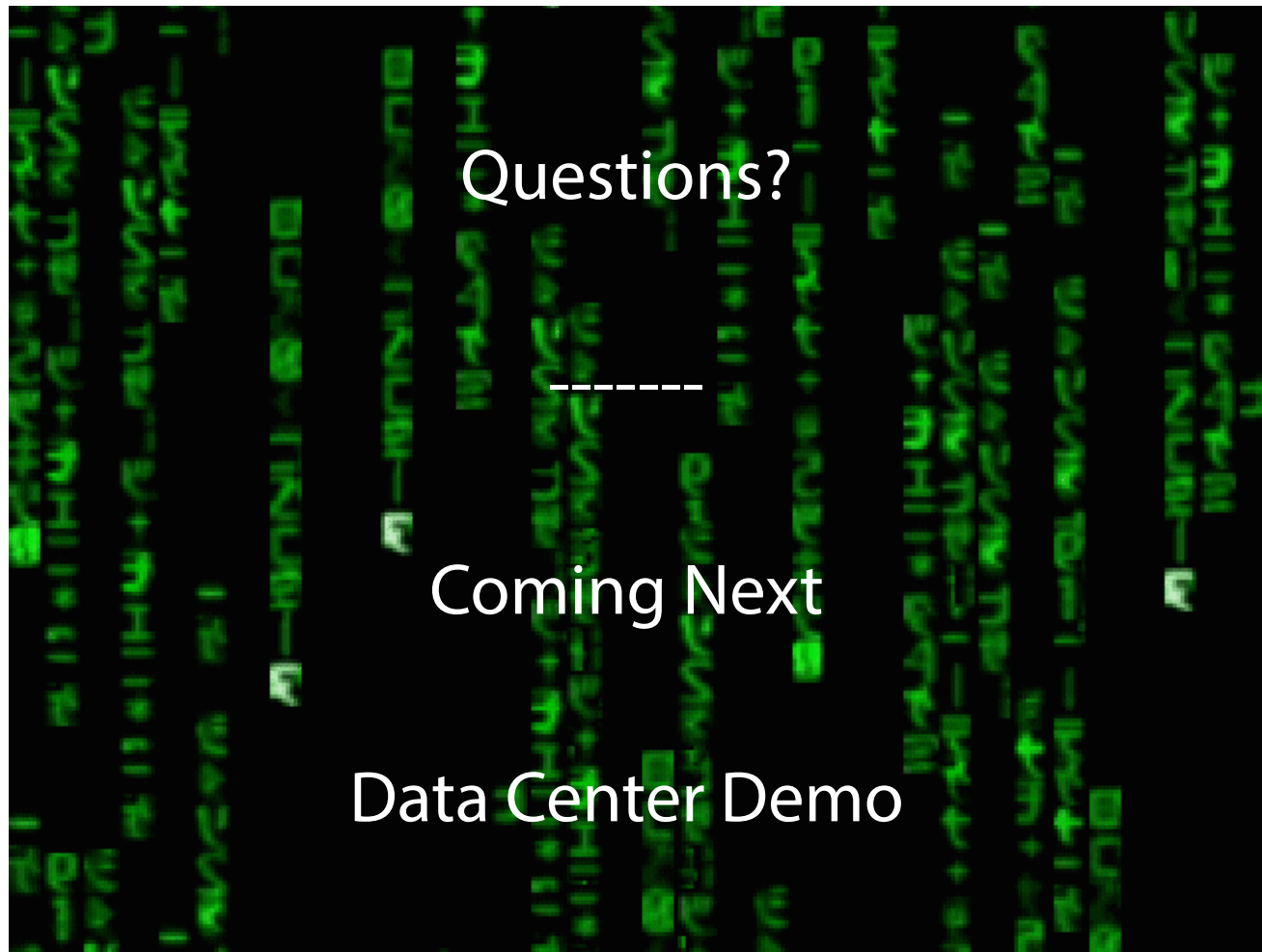
# Office of Technical Data Management

## Data Center (History, Technology, Stats)

- Developed 1998
- Major revamp 2017
  - Microsoft Windows Server
  - Applications written in ASP.NET
  - Oracle Database Materialized Views
- Disc Media Store
  - ~3.5TB of releasable data
  - Well Files, Well Data, Well Log Images, Raw Log Files
  - Scanned Documents
- Stats 2017
  - Users 60,000
  - Downloads 133,000
  - Pageviews 1,465,000



# Office of Technical Data Management

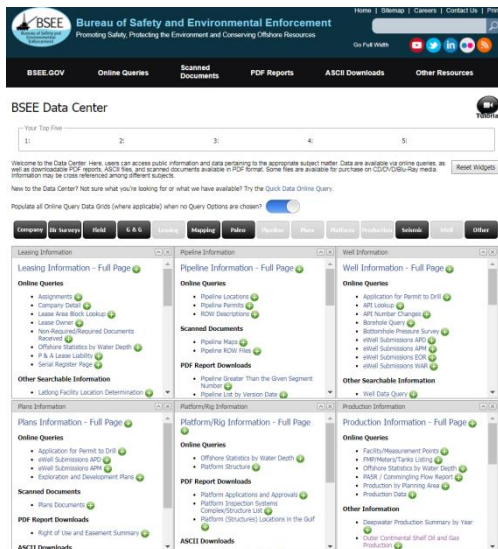




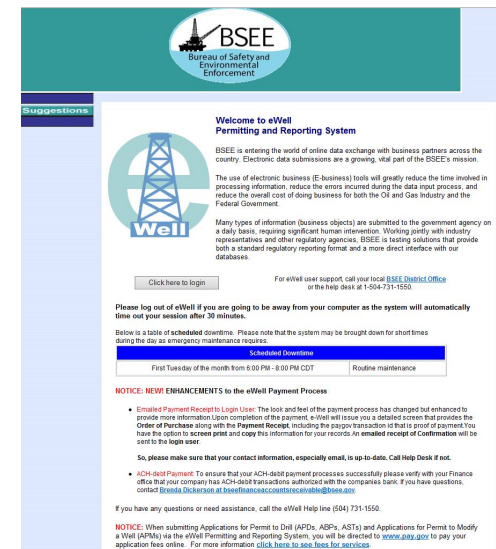
# Thank You



<https://www.bsee.gov/>



Data Center Website:  
<https://www.data.bsee.gov>



eWell Website:  
<https://ewell.bsee.gov>

Questions: [TDM@bsee.gov](mailto:TDM@bsee.gov)

BSEE Website: [www.bsee.gov](http://www.bsee.gov)



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Bureau of Safety and  
Environmental Enforcement



BSEEGov

"To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."